

1                   **ABSTRACT OF THE DISCLOSURE**

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3                   An electric welder for spot fusing a eutectic solder matching a thin film  
4                   deposition on an electrically non-conductive substrate. An example being a gold-tin  
5                   solder fusing to a gold plated ceramic or glass surface. At least one pair of laterally  
6                   displaced electrodes is resiliently engaged with the surface of the eutectic. The  
7                   electrodes are tapered at the terminus to restrict the area of current flow. The  
8                   engaging tip of the electrode is rounded tangentially to the taper and very slightly  
9                   penetrates the surface of the eutectic. Once engaged the electrode pair is pulsed  
10                  with sufficient current, from for example a capacitor discharge circuit, to create a  
11                  local heat cone at the contact point sufficient to reach the eutectic point thereby  
12                  locally fusing the eutectic to the plating.